

ARMY MODEL AND SIMULATION OFFICE (AMSO)

Sixth Annual State of M&S Briefing to Government and Industry.

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Purpose

To provide information on the management and future direction of models and simulations within the Army.



Past Model and Simulation Management

- Each Agency developed its Model and Simulation (M&S) capabilities based on their own “unique” requirements.
- M&S managed along organizational, not functional, lines.
- There was no integration of requirements and investments at HQDA level.

PRIOR TO 1995



ARMY Model and Simulation Management

Focus Areas

Standards

Policy

Planning

Investments

Research

Management
of
Key Programs

DCSOPS

DUSA(OR)

AMSO

*Attention on Integration
Across Three Domains*



Mission

Provide the vision, strategy, oversight, and management of Models & Simulations (M&S) across all M&S domains. Prioritize and integrate M&S requirements and maintain visibility of M&S activities throughout the Army. Integrate fiscal realities to make the Army M&S Master Plan affordable and executable. Army advocate for educating the force on the utility of Models and Simulations.

SPECIFIED TASKS:

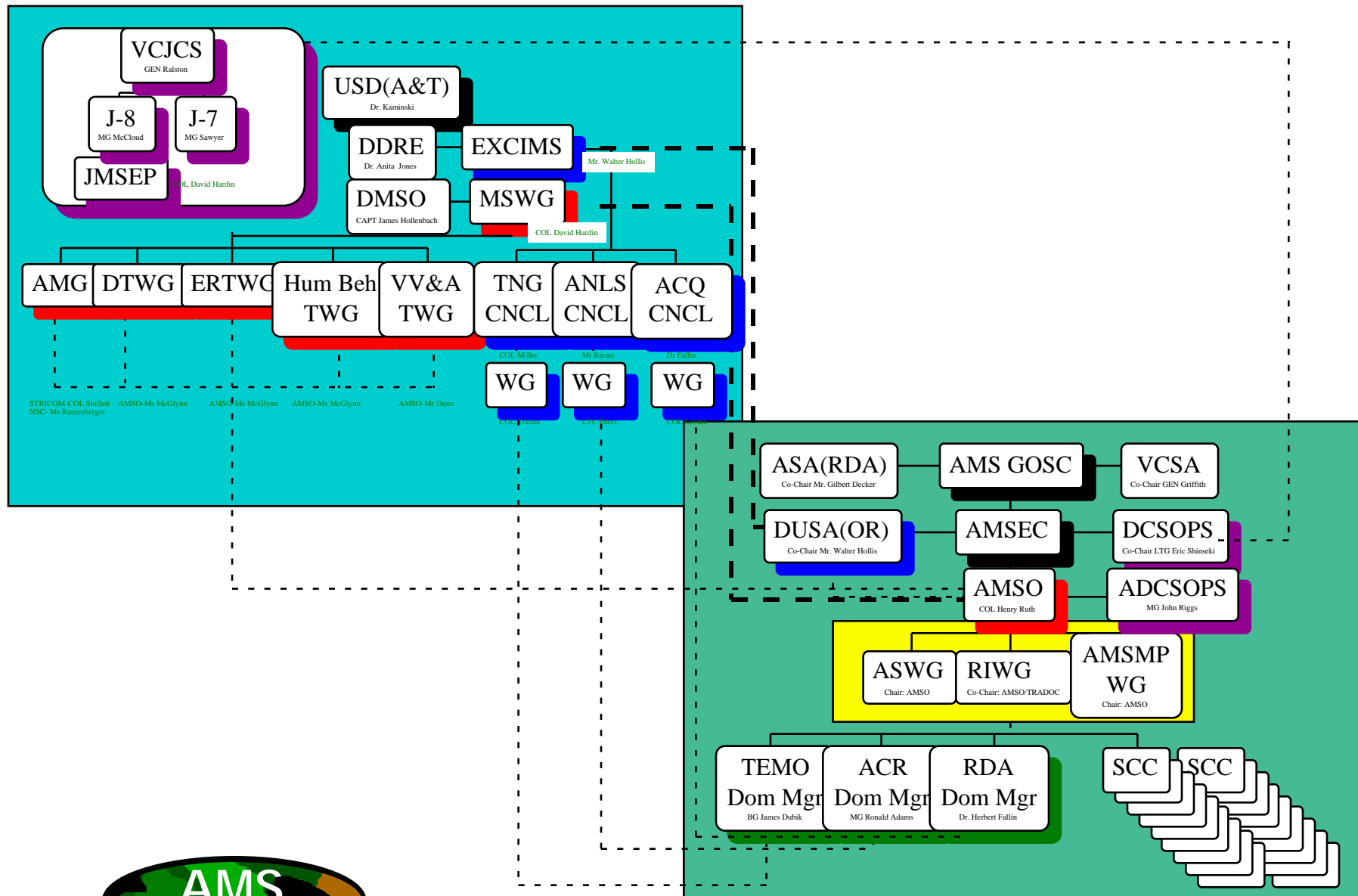
- Coordinate Policy
- Review Requirements
- Prioritize Requirements
- Integrate Requirements
- Advocate M&S Activities
- Fund M&S Activities
- Reconcile Investments
- Assess Progress
- Coordinate M&S Activities
- Provide Visibility
- Manage Infrastructure

Supporting Tasks

- *State Vision*
- *Educate the Force*
- *Approve Requirements*
- *Devise Strategy*



M&S HIERARCHY Coordination Lines



Army M&S Management Structure

CO-CHAIR BY:
VCSA/AAE

ARMY M&S
GENERAL OFFICERS STEERING COMMITTEE
(AMS GOSC)

- Meets as required
- Provides strategic vision and program validation/approval

CO-CHAIR BY:
DCSOPS/DUSA(OR)

ARMY M&S
EXECUTIVE COUNCIL
(AMSEC)

- Provides overall management of M&S and resolves issues
- Meets Semi-annually or as required

**ARMY MODEL and SIMULATION
OFFICE**
AMSO (DAMO-ZS)

- Coordinate Policy
- Provide Visibility
- DA Integrate Requirements for Funding
- DA Provide POM Guidance
- DA Resource Requirements

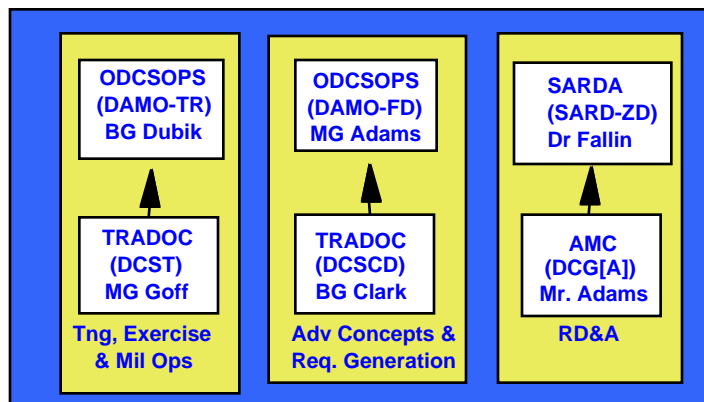
CHAIR BY:
AMSO

ADV SIMS
WORKING GROUP

RQMTS INTEGRATION
WORKING GROUP
(CO-CHAIR HQ
TRADOC)

ARMY M&S
MANAGEMENT
PROGRAM
WORKING GROUP

- Provide management review for M&S development and infrastructure
- Meet semi-annually prior to AMSEC
- TRADOC Approves Requirements



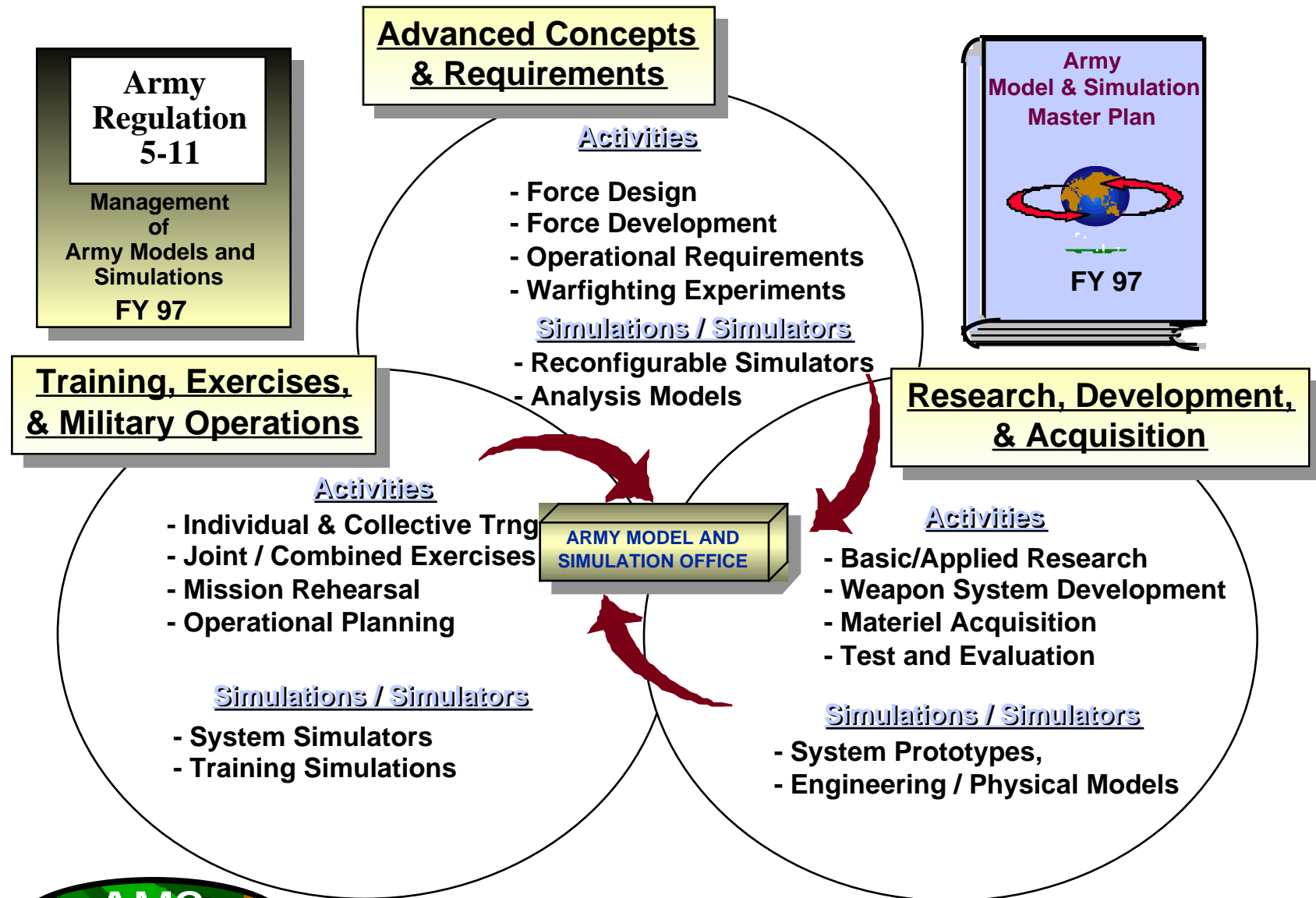
DOMAIN MANAGER

DOMAIN AGENT

- Develop and maintain supporting plans for domains to include:
- Management Plans & Regulations
- Domain Investment Plans
- Requirements Generation and Review

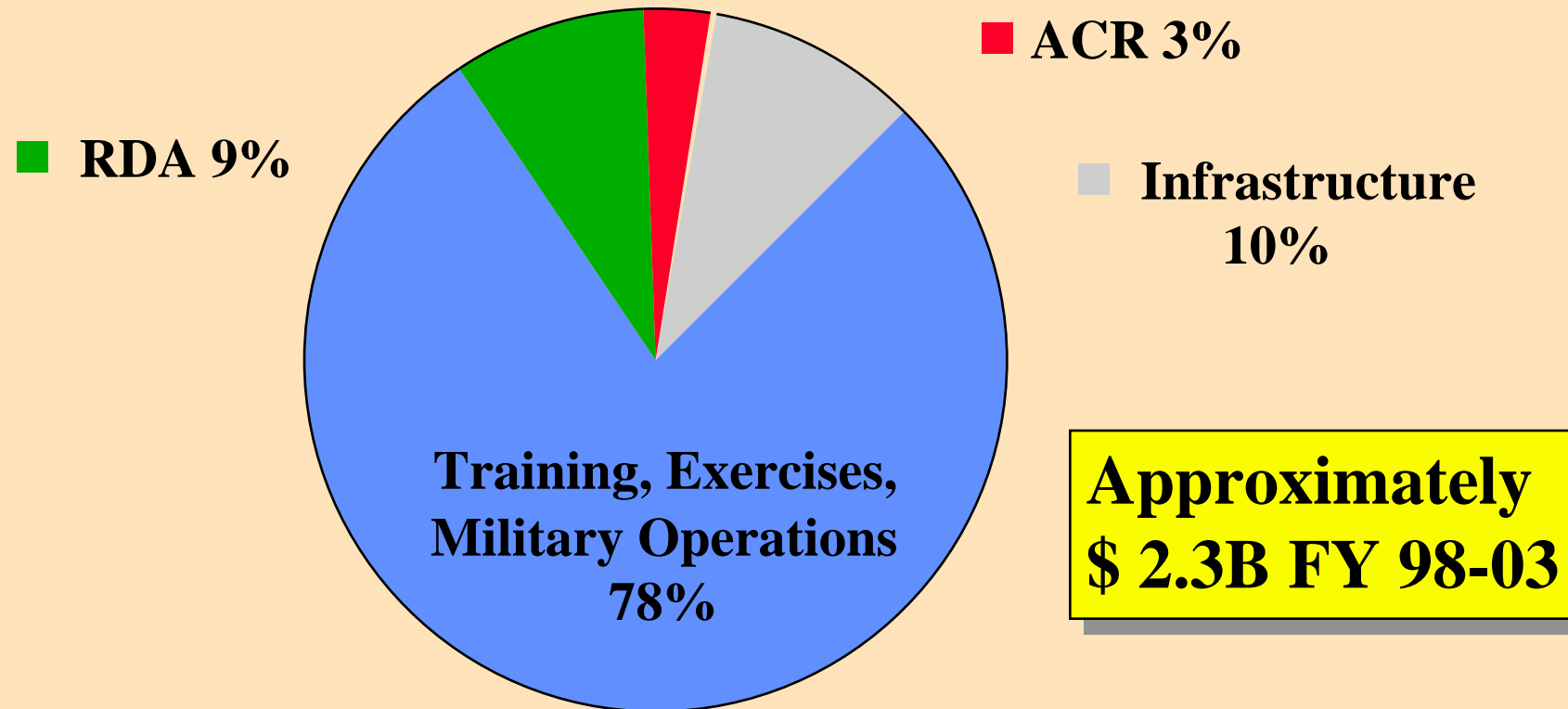


DOMAIN ACTIVITIES AND SIMULATIONS



ARMY M&S INVESTMENT BY DOMAINS

Total Army M&S investment between FY98-03

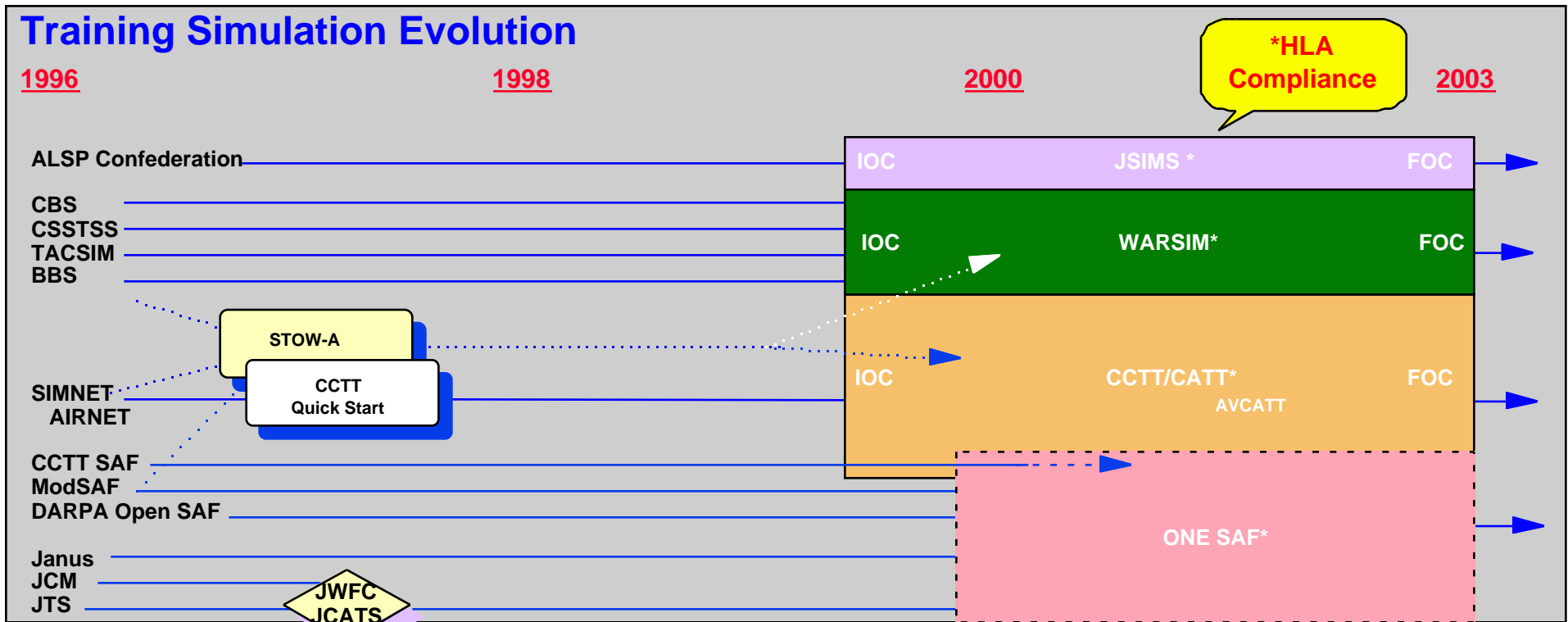


HQDA Defines M&S Activities as the development and maintenance of computer-based Models and Simulation capabilities by and for organizations of the U.S. Army.

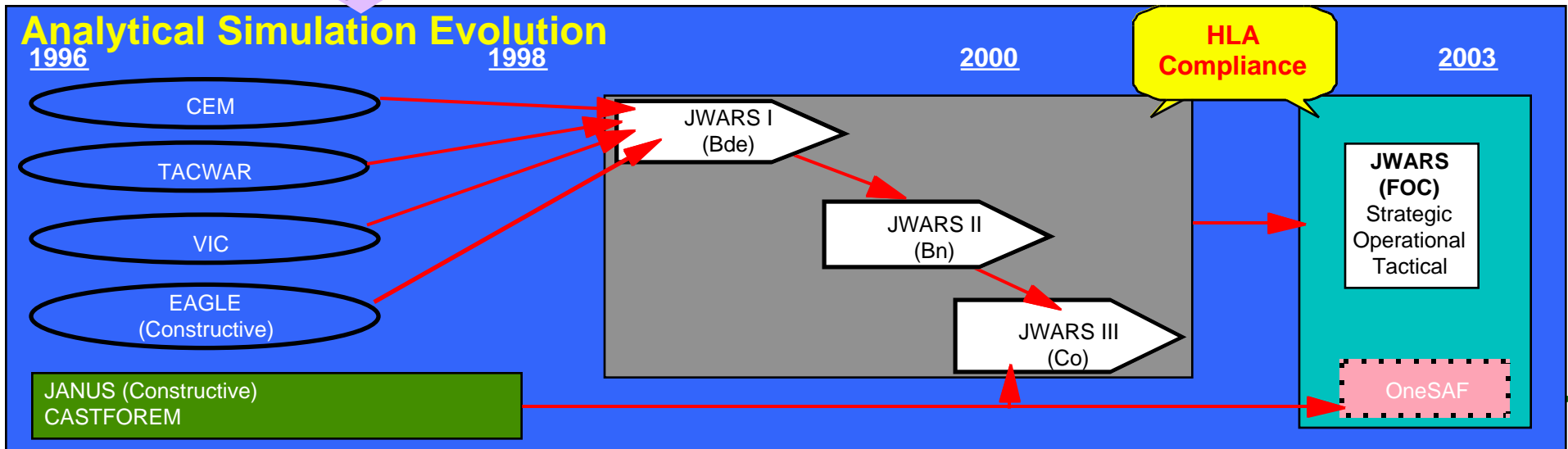


ARMY SIMULATION EVOLUTION PLAN

Training Simulation Evolution



Analytical Simulation Evolution



The Army's Future M&S Battlespace

STANDARDS OF EFFICIENCY

Invest in models, simulations and simulators that:
Provide multi-domain application
Shorten acquisition cycle and reduce cost
Shorten requirements generation
Enhance quality training and reduce operational costs
Support performance/cost trade-offs
M&S activity should meet 3 of 5 standards

REQUIREMENTS:

HLA Compliant

Interoperable:

OneSAF

CATT

WARSIM

JSIMS

JWARS

Reusable

Distributed simulation

C4I interface with M&S

ARMY AFTER NEXT

World Class M&S
Full Spectrum of Operations
Tools for the Total Force
Core Enabling Competency

Integrated into Joint and
Business Operations

18 Standard Categories



M&S Tools of the Future

Consistent

- Modeling Standards - Descriptions, Algorithms, Data.
- Validation, Verification & Accreditation Standards - Definitions, Practices, Archiving.
- Common User Interfaces, Data Standards, across domains.

Accessible

- Embedded: Individual and Collective Training, Decision Support Systems.
- Repositories; Results, Scenarios, Models, Simulations, Data.

Flexible

- Mix and Match Live-Virtual-Constructive.
- Variable Resolution: Forces, Terrain (zoom in and out), & Time Scale.

Efficient

- Centralized development of Core applications -Decentralized development of Special applications.
- Centralized operation of core systems - Distributed users
- "Tailored" commercial applications for individual training/education.

Integrated Applications

- Event Planning, Event Design (Scenario Generation), Event Execution, After Action Review,
- Networked.

Universal

- Used at all levels and within all organizations.
- Mission-based, not organization based.
- Associated with other DoD Component M&S.

Expanded Focus

- Information Warfare before, during, and after combat.
- Emphasis on modeling individual human behavior, not just collective.
- Full spectrum of scenarios for Operations Other Than War linking Strategic, Operational and Tactical Ops.
- Continued emphasis on Joint capabilities.



Army Model and Simulation Office Homepage



<http://www.amso.army.mil>



Summary

- *Army M&S Management Structure in Place*
 - *Management of Current M&S*
 - *Mapping the Road Ahead*
- *M&S Essential for Army Training, Acquisition, and Analysis*
- *M&S must be integrated into Joint and Business Operations*
- *AMSO: Focal point for Army M&S*

